



State of Utah

DEPARTMENT OF NATURAL RESOURCES
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June 18, 1999

To: File

Thru: Joe Helfrich, Permit Supervisor, Compliance *JH*

From: Peter Hess, Reclamation Specialist III *PH*

RE: Notice of Intent to Conduct Minor Coal Exploration, Cyprus Plateau Mining Corporation, Willow Creek Mine, ACT/007/038-99A, Folder #2, Carbon County, Utah

SUMMARY:

Cyprus Plateau Mining Corporation is proposing to drill three exploration holes during the latter part of June 1999 to identify coal characteristics of the "D" seam in selected areas. The application was received at the PFO on June 7. Upon completion of the exploration activities, the holes will be plugged, thereby prohibiting any future use for water monitoring activities. Hole P-E18 will be drilled on the last switch back of the School House Canyon road. Hole P-E13 will be drilled in Price Canyon in close proximity to the Price River Water Improvement District water treatment plant (on surface owned by the applicant). Hole P-E17 will be drilled in Hell Canyon (side drainage off of Willow Creek NE of the Mine's disturbed area). P-E17 will be drilled from a pad that was established pre-SMCRA during the McCulloch Oil Company exploration period.

TECHNICAL ANALYSIS:

MINOR COAL EXPLORATION

NOTICE OF INTENT TO CONDUCT

Regulatory Reference: R645-201-210.

Analysis:

Minor Coal Exploration

The exploration process will implement the drilling of three boreholes to determine the chemical and physical coal characteristics of the "D" seam strata at the chosen locations. Less than two hundred and fifty tons of coal will be removed as a result of this three hole exploration.

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This submittal, therefore, qualifies as a minor coal exploration application.

Findings:

ACT/007/038-99A qualifies as a minor coal exploration amendment.

RESPONSIBILITIES FOR COAL EXPLORATION PLAN REVIEW

Regulatory Reference: R645-201-100.

Analysis:

The three holes relative to this minor coal exploration will be drilled on land whose surface ownership is held by the applicant, Cyprus Plateau Mining Corporation.

Findings:

The Utah Division of Oil, Gas and Mining is the sole party responsible for the review of this minor coal exploration application. All areas to be disturbed are on fee ground owned by the applicant, Cyprus Plateau Mining Corporation.

NOTICE OF INTENT TO CONDUCT MINOR COAL EXPLORATION

Regulatory Reference: R645-201-200; 210 through 225.

Analysis:

This Notice of Intent to Conduct Minor Coal Exploration includes the following information.

- 1) Regulation 201-221; the name, address, and telephone number of the applicant seeking to explore, (see page 2 of the submittal).
- 2) Regulation 201-222; the name, address, and telephone number of the applicant's representative responsible for conducting the exploration activities, (see page 2 of the submittal).
- 3) Regulation 201-223; a narrative and map describing the exploration area and indicating where exploration will occur, (see Map 1, and pages 2 and 3 of the submittal).
- 4) Regulation 201-224; a statement of the period of intended exploration is included, (see page 3).

- 5) Regulation 201-225; a description of the method of exploration to be used, the amount of coal to be removed, and the practices that will be followed to protect the area from adverse impacts of the exploration activities and to reclaim the area in accordance with the applicable requirements of R645-202. (See pages 3 and 4 of the submittal).

Findings:

This notice of intent to conduct minor coal exploration includes sufficient information to adequately address the requirements of R645-201-210 through 225.

COAL EXPLORATION

COMPLIANCE DUTIES

Regulatory Reference: R645-202-100.

Analysis:

Required Documents

This notice of intent to conduct minor coal exploration includes a commitment to distribute copies of the approved finalized notice of intent to conduct minor coal exploration to those individuals (i.e., drillers, geologists, and other agents of the Company) directly associated with the exploration activities.

Findings:

The intent of R645-202-100, regarding distribution of required documents relative to this notice of intent to conduct minor coal exploration has been adequately met.

PERFORMANCE STANDARDS

Regulatory Reference: R645-202-210.

Analysis:

Conducting Minor Coal Exploration in Accordance With State Program

This application commits the permittee to conduct this minor coal exploration according to the performance standards mandated by the R645 rules. Core samples will be recovered; the exploration activities will not substantially disturb the natural land surface. Drill sites will be

reclaimed by backfilling mud pits, redistributing any soils removed, and by the scarifying and seeding of the area. Any minor drainages which have been affected will be reshaped and seeded. All seeding will utilize the permanent upland seed mixture previously approved from Table 5.3-2, Volume 3 of the Willow Creek MRP.

Findings:

This submittal's commitment to reclaim the drill sites according to the intent of the aforementioned regulation is adequate.

Regulatory Reference: R645-202-220.

Analysis:

Minor Coal Exploration Performance Standards Mandate

In this application, the permittee has made a commitment to conduct the minor coal exploration in accordance with the R645 performance standards relative to same.

Findings:

The submittal adequately addresses this requirement.

OPERATIONAL STANDARDS

Regulatory Reference: 202-231.

Analysis:

Habitats of Unique or Unusually High Value/Threatened and Endangered Species

There are no known threatened or endangered species within the proposed area of exploration. This is verified on pages 5, 6, and 7 of the applicant's submittal.

Findings:

The submittal adequately addresses this requirement.

ROADS

Regulatory Reference: 202-232.

Analysis:

Roads

Two of the three exploration sites will be accessed from previously cut (pre-SMCRA) access roads. Hole P-E13 will require new construction approximately 300 feet long to access the site, (.08 acres). Hole P-E17 will be accessed directly from Utah highway 191; the permittee has a UDOT encroachment permit in place to allow this. The access for P-E17 will re-disturb approximately .03 acres. The existing School House Canyon road to P-E18 will need grading from the waste rock disposal site to the exploration site. The steepness of the road will more than likely require the pulling of the drill rig to the site via caterpillar tractor. Minor damage to same will probably occur; however, the permittee has committed to repairing any damage incurred.

The permittee has committed to reclaim the ancillary roads to holes P-E13 and P-E17 during the fall of '99. All roads associated with this minor exploration application are ancillary; all R645 rules relative to primary roads are inapplicable.

Findings:

This submittal adequately addresses the requirements of R645-202-232.

TOPSOIL

Regulatory Reference: R645-202-233.

Analysis:

Protection of Topsoil Resource

The permittee has made a commitment in the application to remove and store the topsoil, which is in place at each exploration site. Holes P-E18 and P-E17 will be drilled on previously disturbed exploration sites drilled pre-SMCRA. Topsoil soil removal during exploration road construction will be achieved by side casting of the material. This is standard practice, as it assists in the rapid redistribution of the resource during reclamation activities. Page 9 of the submittal commits the permittee to the recovery and stockpiling of topsoil from the drill pad areas; this will prevent contamination of the resource by drilling activities. Redistribution of the soils will occur during the reclamation of the drill sites.

Findings:

This submittal adequately addresses the requirements of R645-202-233.

HYDROLOGY

Regulatory Reference: R645-202-234.

Analysis:

Diversions of Overland Flows and Streams

The exploration sites will be drilled in bench areas of tightly confined drainages. Overland flows are generally very small in nature; should any occur, they will be coursed through utilization of water bars, ditches, and/or culverts. There are no streams in close proximity to any of the chosen exploration sites. No major diversions are necessary for this minor exploration project.

Findings:

This submittal adequately addresses the requirements of R645-202-234.

Regulatory Reference: R645-202-235. and R645-301-356.300. through -301-356.400.

Analysis:

Coal Exploration Activities Relative to Maintenance of Prevailing Hydrologic Balance Maintenance of Siltation Structures Revegetation of Sites

This application commits the permittee to maintain all siltation structures until the reclamation (i.e., revegetation) of the sites has been completed.

Findings:

This submittal adequately addresses the requirements of R645-301-356.300. and -301-356.400.

IMPOUNDMENTS

Regulatory Reference: R645-301-512.240; -301-513.200; -301-514.300; -301-515.200;
-301-533.100 through -533.600

Analysis:

P.E. Certification of Impoundment Designs

MSHA pond requirements
Impoundments
Impoundment Hazards/Notification of DOGM
Impoundments

The construction of mud pits at the drill sites will be necessary to control the drilling medium and keep it within the exploration site. The pits will be 12' x 12' x 6' in depth, (page 4 of submittal). These will be totally incised; the volumes contained will amount to .02 acre feet/pit. It is felt that these impoundments do not contain enough volume to warrant the application of the aforementioned regulations.

Findings:

The aforementioned regulations, as they relate to impoundments, are not applicable to this submittal.

GROUND WATER

Regulatory Reference: R645-301-731.100, -301-731.110, -301-731.111

Analysis:

Hydrologic Balance Protection/Groundwater

Page 12 of the submittal commits the applicant to implement methods for protection of ground water. Earth materials and runoff from the drilling activities will be handled in a manner which minimizes the impact of acid, toxic, or other harmful materials. Mud pits will allow evaporation of drilling water, minimizing the potential for this water to impact ground water systems. Preventive methods will be implemented to prevent the over topping of mud pits. All exploration boreholes will be plugged for their entire depth to prevent future contamination of ground water systems via surface influx.

Findings:

This submittal adequately addresses the requirements of R645-301-731.100 through .111.

Regulatory Reference: R645-301-731.112.

Analysis:

Ground Water Protection Relative to Surface Coal Mining

This regulation relates to surface coal stripping operations. Willow Creek Mine is an underground extraction operation.

Findings:

R645-301-731.112 is not applicable to this submittal.

SURFACE WATER

Regulatory Reference: R645-301-731.120; -301-731.121; -301-731.122

Analysis:

**Surface Water Protection
Surface Water Quality and Quantity Protection**

These regulations have been previously addressed under R645-301-731.100-111.

Findings:

This submittal adequately addresses the requirements of R645-301-731.120 through .122.

Regulatory Reference: R645-301-731.200 through -301-731.210.

Analysis:

Ground Water Monitoring

The proposed drill holes will not be used for water monitoring purposes.

Findings:

Ground water monitoring will continue to be conducted by the permittee according to the plan which exists in the current mining and reclamation plan.

Regulatory Reference: R645-301-731.210; -301-731.211; -301-731.212; -301-731.213;
-301-731.214; -301-731.214.1; -301-731.214.2; -301-731.215;
-301-731.220; -301-731.221; -301-731.222

Analysis:

Surface Water Monitoring Requirements

Ground Water Monitoring Plan
Quarterly Monitoring Reports
Division Approval Requirements
Ground Water Monitoring through Bond Release
Minimizing Disturbance to Post Mining Land Use
Monitoring No Longer Necessary
Maintenance of Water Quality/Quantity Monitoring Equipment Required
Surface Water Monitoring
Implementation of Plan According to PHC
Identification of Surface Monitoring Parameters, Frequency, and Locations

This minor coal exploration application will be conducted on fee land within the currently approved Willow Creek Mine permit area. The Division approved surface water monitoring plan, as it exists within the mining and reclamation plan, and it adequately addresses the aforementioned R645 requirements.

Findings:

The aforementioned R645 rules, as they relate to surface and ground water monitoring regimes, have already been adequately addressed by the Cyprus Willow Creek mining and reclamation plan. They do not need to be addressed in this minor coal exploration application.

Regulatory Reference: R645-301-731.800.

Analysis:

Water Rights and Replacement Relative to Surface Coal Mining

This regulation is not applicable to this minor coal exploration application. Geologic data which will be obtained is relative to an underground extraction process.

Findings:

This regulation is not applicable to this minor coal exploration application.

SILTATION STRUCTURES

Regulatory Reference: R645-301-742.200 through -742.214.

Analysis:

Siltation Structures

The construction of siltation structures, as they relate to this minor coal exploration application, has been previously addressed on pages 9 and 10 of this submittal under R645-202-235 and R645-301-356.300 and -356.400. Same have been adequately addressed within this submittal.

Findings:

These regulations have been adequately addressed in a previous section of this submittal.

SEDIMENTATION PONDS

Regulatory Reference: R645-301-742.220; -301-742.221 through -742.240

Analysis:

Sedimentation Ponds

There are no sedimentation ponds in close proximity to, nor will there be any constructed in association with, this minor coal exploration application.

Findings:

These regulations are not applicable to this minor coal exploration application.

Regulatory Reference: R645-301-742.300.

Analysis:

Diversions

These requirements have already been addressed within this submittal.

Findings:

These requirements have already been addressed within this submittal.

Regulatory Reference: R645-301-763-.100 and -763.200.

Analysis:

Siltation Structures

There are no siltation structures associated with this minor coal exploration application. These regulations are not applicable.

Findings:

R645-301-763.100 and -763.200 are not applicable to this minor coal exploration application.

ACID/TOXIC MATERIALS

Regulatory Reference: R645-202-236.

Analysis:

Handling/Disposal of Acid-Toxic Forming Materials

The requirements of R645-202-236 have been addressed on a partial basis under R645-301-731.110, (see page 12). The application commits the permittee to cleaning up and disposing of any fuel contamination, off property, in an approved manner.

Findings:

This submittal adequately addresses the requirements of R645-202-236.

RECLAMATION STANDARDS

Regulatory Reference: R645-202-240; -202-241; -202-242; -202-242.100; -202-242.200

Analysis:

**Return of Exploration Site to Approximate Original Contour
Revegetation of Exploration Sites
Revegetation/Utilization of Native Species
Control of Erosion by Vegetation**

Page 18 of the submittal commits the applicant to the back filling of the associated mud pits during the reclamation process; approximate original contour will thus be achieved. The area will then be scarified and reseeded using the seed mix which has been previously approved in the Willow Creek mining and reclamation plan, (Table 5.3-2). This will occur in the first seeding window following completion of the exploration activities. The School House Canyon road will be left in better condition than it exists at the present time.

Findings:

ACT/007/038-99A adequately addresses the requirements of R645-202-241 thru -242.200.

Regulatory Reference: R645-202-242.

Analysis:

Sealing of Exploration Boreholes

Page 18 of this submittal commits the applicant to cementing the three exploration holes from bottom to collar (for the entire depth) by the licensed driller. The machinery associated with the exploration will then be removed from the pad so that the remaining reclamation requirements (which have been previously addressed) can be initiated.

Findings:

The submittal adequately addresses the requirements of R645-202-243.

Regulatory Reference: R645-202-244; -202-244.100; -202-244.200; -202-244.300

Analysis:

**Removal of Drilling Apparatus
Providing Additional Environmental Data
Reduce or Control Impacts Due to Exploration
Facilitate Future Mining and Reclamation**

All equipment associated with the exploration activities will be removed from the site(s) as soon as compilation of the geologic data is completed. Reclamation activities (as they have been previously addressed within this submittal) can then commence. As the boreholes will be cemented for their entire depth, it will not be feasible to obtain additional environmental data. The reduction of impacts due to exploration will not be necessary. In order to facilitate future mining and reclamation activities, the permittee will need to remove the cement plug from the boreholes.

The submittal adequately addresses the requirements of R645-202-244. through -244.300.

Findings:

ACT/007/038-99A adequately addresses the requirements of R645-202-244 thru -244.300.

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Regulatory Reference: R645-301-830.

Analysis:

Determination of Bond Amount

The permittee currently has approximately \$11,600,000 worth of bond in place for the Willow Creek permit area. Based on the Division's 5% rule, there is sufficient bond in place for the reclamation of the disturbance associated with these three exploration boreholes.

Findings:

The current bond is adequate.

CONCLUSIONS AND RECOMMENDATIONS

ACT/007/038-99A adequately addresses the requirements of R645-201-100., -201-200., and R645-202.

It is recommended that this minor coal exploration application be approved as submitted.

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